

REMARKS

Receipt of the Office action of November 6, 2007 is hereby acknowledged. In that action the Examiner: 1) rejects claims 1-4, 6-12, 16-17, and 22-27 as allegedly unpatentable over Horton (U.S. Pat. No. 5,969,770) in view of MacInnis et al. (U.S. Pat. No. 6,853,385); 2) rejects claim 5 as allegedly unpatentable over Horton and MacInnis further in view of Chauvel et al. (U.S. Pat. No. 6,369,855) 3) rejects claim 13 as allegedly unpatentable over Horton and MacInnis further in view of Yahav et al. (U.S. Pat. No. 6,057,909); 4) rejects claims 14 and 15 as allegedly unpatentable over Horton and MacInnis further in view of Callway et al. (Pub. No. 2003/0027517); and 5) makes the rejection final.

With this Preliminary Amendment, Applicants amend claims 1, 12 and 22-27. Applicants believe the pending claims are allowable over the art of record and respectfully request reconsideration.

III. ART-BASED REJECTIONS

A. Claim 1

Claim 1 stands rejected as allegedly unpatentable over Horton and MacInnis. Applicants amend claim 1 to more clearly define over MacInnis's teaching of alpha values in blending of graphics images.

Horton is directed to animated "on-screen" display provisions for an MPEG video signal processing system. (Horton Title). In particular, Horton appears to disclose an apparatus for providing OSD graphics (Horton Col. 2, lines 36-37). Horton teaches that prior to overlaying a graphics image with a video image, the graphics image is compressed (Horton Col. 8, lines 4-8). In particular, the graphics image is compressed by selectively including or excluding color difference components (i.e., chrominance value) for successive pixels, without allowing for the possibility of retaining partial values for each pixel. Specifically, for every two graphics pixels, the graphics image data converter selects the pair of color difference components for the first pixel and deletes the pair for the second pixel (Horton Col. 8, lines 8-11). Thus, Horton's overlay scheme is an unweighted overlay scheme wherein each pixel's chrominance value is either fully included or fully excluded.

MacInnis is directed to a video, audio and graphics decode, and composite display system. (MacInnis Title). In particular, MacInnis appears to disclose a graphics display system which

includes blending of plurality of graphics images based on alpha values. (MacInnis Col. 46, lines 57-63). The alpha values are derived per pixel using three different methods such as an alpha value from a key, an alpha value from the Y component, and an alpha value from a lookup table. (MacInnis Col. 112, lines 16-23). In particular, the method for deriving alpha value from a key comprises comparing the color components of the pixel to a predefined value, and the alpha value for the pixel is set to 0 or 1 based on the comparison. (MacInnis Col. 112, lines 32-37). Similarly, the method for deriving alpha value from the Y component comprises determining if the value of Y component of the pixel is within a predetermined range, and setting the alpha value to 0 or 1 based on the determining. (MacInnis Col. 112, lines 47-53). Further, MacInnis teaches deriving a composite alpha value of all the pixels in the image after the graphics have been blended. (MacInnis Col. 7, lines 35-41). Thus, MacInnis appears to teach deriving alpha values per pixel by comparing either the color components of the pixel or the Y component of the pixel to a predetermined value, and deriving the composite alpha value of all the pixels in the image based on the derived alpha values after blending the graphics.

Claim 1, by contrast, specifically recites, “weight factor proportional to a plurality of luminance values in the digital graphics object indicating transparency.” Applicants respectfully submit that Horton and MacInnis fail teach or fairly suggest such a system. Horton teaches an unweighted overlay scheme that fully includes or fully excludes each pixel’s chrominance value. MacInnis teaches alpha values that indicate whether a pixel is transparent or opaque; but, MacInnis fails to teach a weight factor proportional to a number of luminance values indicating transparency. Thus, Horton and MacInnis fail to teach or fairly suggest **“weight factor proportional to a plurality of luminance values in the digital graphics object indicating transparency.”**

Based on the foregoing, Applicants respectfully submit that claim 1, and all claims which depend from claim 1 (claims 2-11), should be allowed.

B. Claim 12

Claim 12 stands rejected as allegedly unpatentable over Horton and MacInnis. Applicants amend claim 12 to more clearly define over MacInnis’s teaching of alpha values in blending of graphics images.

Claim 12 specifically recites, “weight factor proportional to a plurality of luminance values in the digital graphics object that indicate transparency.” Applicants respectfully submit that

Horton and MacInnis fail teach or fairly suggest such a system. Horton teaches an unweighted overlay scheme that fully includes or fully excludes each pixel's chrominance value. MacInnis teaches alpha values that indicate whether a pixel is transparent or opaque; but, MacInnis fails to teach a weight factor proportional to a number of luminance values indicating transparency. Thus, Horton and MacInnis fail to teach or fairly suggest **“weight factor proportional to a plurality of luminance values in the digital graphics object that indicate transparency.”**

Based on the foregoing, Applicants respectfully submit that claim 12, and all claims which depend from claim 12 (claims 13-17), should be allowed.

C. Claim 22

Claim 22 stands rejected as allegedly unpatentable over Horton and MacInnis. Applicants amend claim 22 to more clearly define over MacInnis's teaching of alpha values in blending of graphics images.

Claim 22 specifically recites, “weight factor proportional to a plurality of luminance values in the digital graphics object that indicate transparency.” Applicants respectfully submit that Horton and MacInnis fail teach or fairly suggest such a system. Horton teaches an unweighted overlay scheme that fully includes or fully excludes each pixel's chrominance value. MacInnis teaches alpha values that indicate whether a pixel is transparent or opaque; but, MacInnis fails to teach a weight factor proportional to a number of luminance values indicating transparency. Thus, Horton and MacInnis fail to teach or fairly suggest **“weight factor proportional to a plurality of luminance values in the digital graphics object that indicate transparency.”**

Based on the foregoing, Applicants respectfully submit that claim 22, and all claims which depend from claim 22 (claims 23-27), should be allowed. Further, Applicants amend claims 23-27 to ensure that the claims belong in one statutory category.

IV. CONCLUSION

In the course of the foregoing discussions, Applicants may have at times referred to claim limitations in shorthand fashion, or may have focused on a particular claim element. This discussion should not be interpreted to mean that the other limitations can be ignored or dismissed. The claims must be viewed as a whole, and each limitation of the claims must be considered when determining the patentability of the claims. Moreover, it should be understood that there may be

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other distinctions between the claims and the cited art which have yet to be raised, but which may be raised in the future.

Applicants respectfully request reconsideration and that a timely Notice of Allowance be issued in this case. If the Examiner feels that a telephone conference would expedite the resolution of this case, he is respectfully requested to contact the undersigned. It is believed that no extensions of time or fees are required, beyond those that may otherwise be provided for in documents accompanying this paper. However, in the event that additional extensions of time are necessary to allow consideration of this paper, such extensions are hereby petitioned under 37 C.F.R. § 1.136(a), and any fees required (including fees for net addition of claims) are hereby authorized to be charged to the Texas Instruments, Inc. Deposit Account No. 20-0668.

Respectfully submitted,

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